

# PEARLING in the AMERICAS

by  
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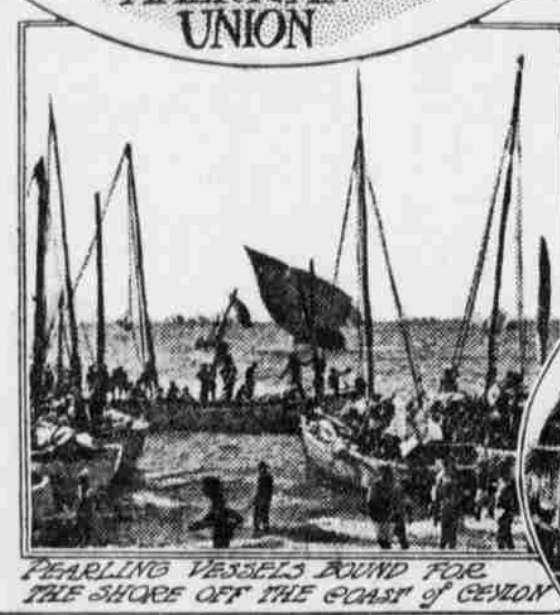
of the PAN  
AMERICAN  
UNION

DIVER ABOUT TO DESCEND  
TO THE SEA BOTTOM

ROCKS CONTAINING TRODS OF JEWELS  
COLLECTED AT THE SAN CARLOS  
STATION



TRANSFERRING JEWELRY BOXES  
FROM THE NETS TO THE TRAYS



PEARLING VESSELS ROUND FOR  
THE SHORE OFF THE COAST OF CEYLON



LOADING  
MARKET IN  
CEYLON

OVER in Ceylon the loyal natives have long called their beautiful island "Pearl-drop on the brow of India." A name most appropriately bestowed when we recall that in Ceylon waters lie probably the oldest pearl-fishing grounds known to man. For thousands of years they have sent forth the choicest gems to add luster to the crown of royal ruler or to adorn the bosom of the fairest queen of culture and wealth.

Shortly after nightfall of a pleasant evening our little steamer sailed out of the harbor of Colombo, bound for the "pearly shores," for an anchorage a few miles off the port of Aripun, near which place the pearl-fishing fleet was to begin operations at the rising of the sun. In Ceylon the oyster beds are under government supervision, and about March of each year a great pearl-fishing expedition hovers over the waters of the Gulf of Mannar. The personnel of the fleet is made up of Malays, Arabs, Indians, Singalese, and those from various other branches of India's teeming millions.

The experience of the stranger with the unique fleet is not disappointing. The sight of thousands of divers from hundreds of little boats, plunging into the water or riding downward astride heavy weights, rising with their treasures, others returning to the watery depths, the babel of strange voices combined to paint a picturesque and lasting impression upon the mind of the visitor.

The waters around Ceylon and those of the Gulf of California have the richest pearl-producing oyster beds in existence. Situated on opposite sides of the earth, it is interesting to compare the work of the pearl hunters or divers, so far separated, yet pursuing many methods in common in the search for precious gems beneath the waters. In Ceylon upon a given signal the diving begins; the boats are small and hold comfortably eight or twelve persons. The men wear few clothes, and each man takes a turn at diving, for all of them appear to be experts. A rope with weight attached is thrown over the side of the boat, the diver attaches himself to the rope, and his assistant lowers him into the water. Other divers plunge downward unassisted. Around the diver hangs a bag, within which he places the oysters as rapidly as he can pick them from the sea bottom.

On the Mexican coast, of which La Paz is the general rendezvous, the method of pearling is much the same as in Ceylon. Many of the vessels used are larger, and the modern diving suit is more in evidence. There is usually a large sailboat called the "mother," and probably half a dozen smaller ones termed "luggers." The latter are manned by a crew of six or eight men, one or two of whom are divers. The small boats transfer their catches at frequent intervals to the larger vessel standing by, where the shells are opened and carefully examined for pearls.

What is a pearl? Before considering other pearl-fishing grounds, especially those of the Americas, it may be of interest to know just how the pearl is produced; that is, so far as the scientific reader is concerned. One of the shortest and most striking definitions is that suggested by a French scientist, who says "a pearl is the brilliant sarcophagus of a worm." Others go more into detail and declare that the growth of the pearl is often associated with a possible degree of annoyance or pain. The tiny deposit that finds itself within the shell of a mollusk or oyster may be introduced accidentally or purposely, as we shall see later. The foreign substance within the shell is believed to irritate the oyster and he begins to cover it with a series of thin layers of calcium carbonate. Little by little these peculiar layers are formed, and in a few years a beautiful pearl may be the result, or the formation may prove absolutely worthless.

Pearl-forming mollusks are widely distributed over the world, and they may be univalves or bivalves; in the former shape we sometimes find them in conchs and in the latter classification in clams and oysters. The subject in various ramifications has proved interesting and fascinating to investigators; but this story is only a general talk about the pearl, and the scientific details are left to those who make a serious study of the nature of this famous and much-prized ornament.

Salt-water pearl fishing in the Americas has been pursued from our earliest history, and while these pearling waters may not be as ancient as

the fisheries of Ceylon or those of the Persian gulf, Columbus and those who followed in his wake often found uncivilized natives wearing pearls of great value. Indeed, so many pearls were found off the Venezuelan coast that early explorers gave the name of "El Golfo de las Perlas" to certain waters where the pearls appeared to be plentiful.

Today the pearl fisheries of Margarita Island, off the Venezuelan coast, become active each autumn, when hundreds of small boats present a scene not unlike that of the pearl season of California or Ceylon.

Many of the expert divers of Venezuela have engaged themselves to an Ecuadorian company which is developing pearl fishing along the coast of that country. Near the little port of Manta the results have proved quite satisfactory, and during a recent year about \$20,000 worth of pearls were shipped to European markets.

About the shores of numerous islands in the Bay of Panama there are pearl fisheries. One of these islands, to which the name of Pearl has been given, has long been supplying pearls of greater or less value. The work about this and other islands of Panama bay is carried on like that of Lower California. One of the great difficulties encountered is the heavy tides of this section of the Pacific, which prevent steady work.

There are various other sections of the oceans that supply fine pearls, such as the shore of Queensland (Australia), the Red Sea, New Guinea waters, about the island of Madagascar, and elsewhere. Generally speaking, an ordinary fishing boat party expects to secure several tons of shells a day, and possibly one shell in a thousand contains a pearl. The Mexican waters in which fishing is done are from 30 to 50 feet deep, and the fleet is active four to six months in the year, beginning operations in the autumn. A pearling expedition as equipped for the Mexican waters often costs \$10,000 to \$15,000 to outfit, and possibly at the end of the season the catch may not be worth half the amount expended. But if no mishap occurs to any of the little vessels the supply of mother-of-pearl shells obtained should be of sufficient value to repay the general outfitting expenses.

One of the allied industries of pearl fishing is that of obtaining valuable shells, which we know as mother-of-pearl. The latter are found generally along with the pearl fisheries; and often when no pearls exist within the oyster the shells themselves may be of considerable value. Mother-of-pearl is defined as the "internal nacreous lining of the molluscan shell." This shell, as is well known, is in general use in our homes, where it is highly prized for toilet articles, for handles to knives, for buttons, and countless other services where a high polish and lasting qualities are desired. The monks and other inhabitants of Bethlehem are said to be among the world's most skilled workers in mother-of-pearl shells; the beautiful ornaments that come from that ancient city are highly valued in leading cities of Europe and America.

Pearls in the Americas, as in other countries, should now be within the reach of those of modest means. Today in world markets of London, Bombay, Paris or La Paz the pearl is selling for about half its ordinary value.

It is said that pearls from waters of the Americas are to be seen in the crowns of most Euro-

pean rulers. One of the most valuable pearls ever obtained in Mexican fisheries was sent to Paris and there sold to the emperor of Austria for \$10,000. On another occasion the government of Spain presented to Napoleon III a black Mexican pearl valued at \$25,000. The combination tints of black, blue and green are quite rare, and the Mexican and Panama pearls often combine these colorings, and apparently have reached pearl perfection.

The Venezuelan fisheries produce annually more than half a million dollars' worth of pearls. Many of the world's most beautiful gems have come from that country, and it is said that in 1579 King Philip of Spain obtained from near Margarita Island a pearl weighing 250 carats, which was variously estimated to be worth from \$40,000 to \$100,000. The most perfect pearl in the world is said to be "La Perlegrina," a rare gem that is preserved in the Zoological museum in Moscow; it weighs 28 carats, is globular in form, and originally came from Indian waters. The world's largest pearl is in the Hope collection in the Victoria and Albert museum, London. It weighs three ounces and has a circumference of 4 1/2 inches.

One of the world's leading authorities on pearls is Dr. George F. Kunz. According to a recent writer, the former says that a pearl of the finest grade should have "a perfect skin, fine orient or delicate texture, be free from specks or flaws, and be of translucent white color, with a subdued iridescent sheen. It should be perfectly spherical, or if not, of symmetrical shape. White or pink pearls are the finest, owing to their delicate sheen."

In China and Japan the mention of the pearl occurs in the history of those countries as early as 1000 B. C. Pearling industry in both nations has passed down through the ages, and even today it gives employment to many workers, skilled and unskilled. Visitors to Japan will be especially interested in Mikimoto's pearl farms at Argo bay; they are marvels of scientific accomplishment in the propagation of pearls. The methods pursued are more or less as follows: The young oysters are brought from the water, a serum is injected into the shell; this substance sets up irritation within, and the oyster, it seems, then begins to coat the offensive foreign matter with layer after layer of calcareous deposits. A few years pass and the same oyster is fished from the waters and his pearl-making work examined. Possibly a beautiful pearl may have been formed.

Many so-called pearls seen today are but imitations of the genuine article, and some of them are so cleverly constructed that a trained eye is required to see the deception.

River or fresh-water pearls are found quite generally in temperate climates of the northern hemisphere, especially in the British Isles, Saxony, Bavaria, Bohemia, Canada, and in many states of the Union. In several of the rivers of Ohio, in those of Wisconsin, Illinois, Arkansas, Tennessee, Kentucky, Texas, Michigan and other states, mussels have been found from time to time that contained good pearls.

quarters and the whale happens to be young, with tender, thin hide, the harpoon flies through the body, the rope holding the wounded creature fast, and men are dispatched in boats to spear the prisoner. The whale is towed into the harbor and moored, to be dragged by steam power and logging chains up the slippery, slanting wharf.

Building of the New York barge canal made necessary the construction of 40 dams.

## HOME TOWN HELPS

### KEEPING THE CITY CLEAN

Washington Physician Tells of the Importance of the Work That Has Been Done.

"If Washington residents continue cleaning up this week as they did last week," remarked a Washington physician, "a long step will be taken in the direction of making the national capital a stylish, dirtless and diseaseless city during the coming summer."

"Dirt, flies and disease go hand in hand. Get rid of the dirt, and the flies have nowhere to breed and propagate. Eliminate the flies, and three-fourths of the sickness of summer will be prevented."

"There is no more reason for permitting accumulations of decaying rubbish, heaps of stable manure and the like to remain in alleys, on vacant lots, or hidden in back yards, than for allowing such refuse to exist in the front yard or the open public street," the doctor continued. "Property owners, householders and health officials alike would refuse to permit the continuance in exposed places of such debris and filth, the latter from sanitary reasons and the former out of pride."

"But often the health authorities cannot know of such accumulations hidden in back yards with high board fences, and inspectors fail to discover them in out-of-the-way alleys, etc. In such cases the householder or the property owner ought to take a sufficient degree of pride in his home or his property to see that the rubbish is hauled away; if he doesn't do it he ought to be prosecuted, the same as would be the case if he permitted any other nuisance to remain unabated."

"Flies carry disease of many kinds, all of them filth diseases. Typhoid fever is the chief among these, although a score of the so-called 'summer ailments' are borne by flies. Great progress has been made in Washington in the last few years in eliminating the fly by destroying the breeding places where the insects propagate and from which they spread to all the houses in the neighborhood. Much more can be done along this line if citizens generally will continue to cooperate in a whole-hearted manner in the clean-up activities, and it is not too much to say that continuance of campaigns such as that of this spring and several preceding springs may be expected, in a few years, to make flies as rare in the District of Columbia as buzzards are in Maine."—Washington Star.

### In Setting Plants.

In setting any kind of plants make sure that the roots are well spread out. The most important thing is to bring the soil into as close contact with the roots as possible. The root can take no moisture from the soil in a natural condition until the soil is so close to the root that capillary water flows from the water film around the soil particles to the root. We water newly set plants for two purposes: 1. To keep alive the plant till it can get to taking in water naturally, without the help of water artificially supplied. 2. To wash the earth particles more closely about the roots and so help bring about an early contact of the roots with the soil. Some do not know this and try purposely to leave the soil as light about the roots as possible, thinking the roots can thus penetrate it easier. The penetrating power of roots is beyond the calculation of most people. Roots will go wherever there is food, moisture and air, no matter how firm the soil may be. Corn roots are frequently found four feet below the surface, having passed through layers of earth very firm and which, of course, had never been disturbed by the plow.

### Roses in Lath Houses.

In choosing roses for planting in lath houses or places somewhat shady, extreme care must be paid to choosing sorts known to be free from mildew. First-class drainage of soil will do much to overcome this fungus and it will prove a pleasant surprise to see how many roses will thrive in summer with little or no sun. A concrete building was erected on a lot adjoining a garden, on the south side. This threw in complete shade a half-dozen roses, and several others were thereafter in partial shade. It was a pleasant surprise to note that in three years but two have been troubled with mildew, not badly however, and only at such times as others in full sun were also affected.

### Put Well Away From the House.

The old-fashioned idea of having the well in close proximity to the house is being relegated to the discard as fast as a growing knowledge of sanitary science can put it there. To locate the well away from the zone of possible contamination and at the same time meet the requirements of house, barn, garage and garden, is causing a decline in the demand for the long-popular cheap pump. The growing demand for modern conveniences in suburban districts is creating a demand for a better grade of pumps.

### Outrageously Funny.

"I'll never again invite that professional humorist to dinner," exclaimed Mrs. Newlyrich. "Why, he made our English butler laugh."—Philadelphia Ledger.

### Coined "Angels."

An "angel" was an ancient gold coin weighing four pennyweights and valued at 6s in the reign of Henry VI. and at 10s in the reign of Elizabeth I. In 1562, it took its name from the effigy of an angel embossed on one side.

## Lengrand No. 59062

Is a bay Belgian Stallion, 9 years old; weight 1900 lbs.; small stripes in forehead, and right hind foot white. He was bred by Mr. Felix Gomez, of Basilly, and was imported March 1, 1911, by W. A. Lang & Co., of Grovelly, Iowa. He was foaled in 1906.



PEDIGREE—Bred by Prince du Chenoy (21308), he by Due du Chenoy (11056), out of Charlotte II (15409). Dam, Monche de Thines (28809), out of Organiete (3604), out of Fanie de Villers (40705).

### Will Stand the Season of 1915

Monday, at the Chas. Bliven farm.  
Tuesday, at the Char. Heikes farm.  
Wednesday and Thursday at Henry Filmore's.  
Friday, at the Homer Livery Barn.  
Saturday, at the E. L. Ross place on the old Wm. Nixon farm.

TERMS—\$15 to insure in foal; \$20 for standing colt. Upon the sale or removal of mares from the county, foal bill becomes due at once; or when mares are not properly returned for trial service, fees become due at once. Due care will be taken to prevent accidents, but at risk of owner of mare, if she sustains any.

Leonard Ross Owner & Attendant  
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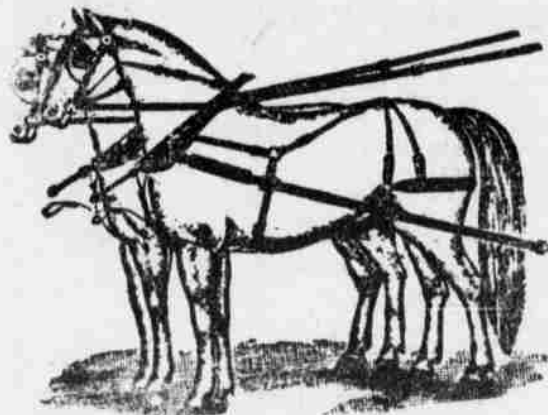
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### WHALING AS IT IS TODAY

Modern Methods Have Supplanted the Old-Time Ways Once Considered Good.

At Snooks Arm, on the east coast of Newfoundland, is a scientific whaling station. Here, as well as the great whaling stations of Iceland and Norway, recently constructed steamers are employed, equipped with every appliance that skill can devise.

A rim-harpoon is no longer hurled

from the hand of some trained Eskimo, but an immense iron bar, more than six feet long, with great wings, or flanges, a few feet from the end, like the bars of a cross, except that they are folded back close to the main shaft, is now fired from a cannon on the ship. There is a large projectile at the end, fixed sharp and pointed so as to penetrate the whale's body. It is loaded with combustibles that generate volumes of gas.

The work done by the whaling ship is mathematically exact. The vessel

steams within a hundred yards of the whale. A man with steady nerves and quick aim is at the cannon, and in an instant there is a flash and the great harpoon is hurled through the air. With unerring aim it plunges into the whale's side, the wings on the cross bar suddenly flying horizontal and the exploding projectiles generating great volumes of gas that keep the body aloft. Death is very speedy and almost without suffering if the range is not too close.

When the cannon is fired at close